

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An AM receiving circuit comprising:
 - an intermediate frequency ~~amplifying~~ unit that generates an intermediate frequency signal from ~~converts~~ a broadcast wave signal into an intermediate frequency signal and received by an antenna to amplifyies and output the intermediate frequency signal;
 - an AGC (Automatic Gain Control) circuit unit that sets a gain of the intermediate frequency ~~amplifying~~ unit depending on electric field intensity of the broadcast wave signal; and
 - an AM detecting unit that detects the intermediate frequency signal output from the intermediate frequency ~~amplifying~~ unit to produce an audio signal; and ,wherein the AM receiving circuit comprises
 - a sound quality compensating unit including:
 - a filter unit that extracts a predetermined frequency band of the audio signal;
 - an amplifying unit that boosts or attenuates the audio signal in the predetermined frequency band extracted from the filter unit; and
 - a controlling unit that controls filter characteristics of the filter unit and sets a boosting function or an attenuating function of the amplifying unit, depending on the electric field intensity of the broadcast wave signal.

2. (currently amended) The AM receiving circuit of claim 1, wherein

the filter unit consists of a low-pass filter that attenuates a high frequency band component of the audio signal and a high-pass filter that attenuates a low frequency band component of the audio signal ~~output from the low-pass filter.~~

3. (Original) The AM receiving circuit of claim 2, wherein

the low-pass filter has filter characteristics that attenuate a higher frequency band component of the audio signal with weakening the electric field intensity in a predetermined electric field intensity range of the broadcast wave signal, and wherein

the high-pass filter has filter characteristics that attenuate a lower frequency band component of the audio signal output from the low-pass filter with weakening the electric field intensity in a predetermined electric field intensity range of the broadcast wave signal.

4. (Currently amended) The AM receiving circuit of ~~any one of~~ claims 1, 2, and 3, wherein

the controlling unit controls the filter characteristics of the filter unit and sets the boosting function or the attenuating function of the amplifying unit, depending on a signal-meter signal output from the AGC circuit.

5. (Currently amended) The AM receiving circuit of ~~any one of~~ claims 1, 2, and 3, comprising:

an intermediate frequency filter that extracts a carrier frequency component of the intermediate frequency signal output from the intermediate frequency amplifying unit; and

an integrator that integrates output of the intermediate frequency filter, wherein
the controlling unit controls the filter characteristics of the filter unit and sets the
boosting function or the attenuating function of the amplifying unit, depending on the
integration output of the integrator, if the electric field intensity of the broadcast wave
signal is lower than a predetermined value, and ~~wherein~~
the controlling unit controls the filter characteristics of the filter unit and sets the
boosting function or the attenuating function of the amplifying unit, depending on the
signal-meter signal output from the AGC circuit, if the electric field intensity of the
broadcast wave signal is higher than a the predetermined value.

6. (New) A method of receiving an amplitude modulated broadcast wave signal having an
electric field intensity, comprising:

converting the broadcast wave signal to an intermediate frequency signal;
amplifying the intermediate frequency signal under control of an automatic gain control
circuit;
detecting the amplified intermediate frequency signal to obtain an audio signal;
filtering the audio signal to extract a predetermined frequency band of the audio signal,
the filtering done by means of a filter having filter characteristics;
amplifying or attenuating the filtered audio signal; and
controlling the filter characteristics and the amplification or attenuation of the audio
signal in response to the electric field strength of the broadcast wave signal.

7. (New) The method of receiving an amplitude modulated broadcast wave signal of claim 6, wherein filtering the audio signal further comprises:

attenuating high frequency components of the audio signal by means of a low pass filter;
and

attenuating low frequency components of the audio signal by means of a high pass filter.

8. (New) The method of receiving an amplitude modulated broadcast wave signal of claim 7, further comprising:

controlling at least one of the attenuation factor of the low pass filter, the attenuation factor of the high pass filter, and the amplification or attenuation of the filtered audio signal in response to a signal output from the AGC circuit.

9. (New) The method of receiving an amplitude modulated broadcast wave signal of claim 8, wherein at least one of the attenuation factor of the high pass filter and the attenuation factor of the low pass filter are increased as the electric field intensity of the broadcast wave signal decreases.

10. (New) The method of receiving an amplitude modulated broadcast wave signal of claim 7, further comprising:

filtering the amplified intermediate frequency signal to extract a carrier frequency

component of the intermediate frequency signal;

integrating the extracted carrier frequency component to produce an IF carrier intensity signal;

controlling at least one of the attenuation factor of the low pass filter, the attenuation factor of the high pass filter, and the amplification or attenuation of the filtered audio signal in response to a signal output from the AGC circuit if the electric field intensity of the broadcast wave signal is higher than a predetermined value; and

controlling at least one of the attenuation factor of the low pass filter, the attenuation factor of the high pass filter, and the amplification or attenuation of the filtered audio signal in response to the IF carrier intensity signal if the electric field intensity of the broadcast wave signal is not higher than the predetermined value.

11. (New) a sound quality compensating unit for use in an AM radio receiver providing an audio signal and a signal corresponding to the electric field strength of a received broadcast wave signal, the sound quality unit comprising:

a filter unit that extracts a predetermined frequency band of the audio signal;

an amplifying unit that boosts or attenuates the audio signal in the predetermined frequency band extracted from the filter unit; and

a controlling unit that controls filter characteristics of the filter unit and sets a boosting function or an attenuating function of the amplifying unit, in response to the signal corresponding to electric field intensity of the broadcast wave signal.

12. (New) The sound quality compensating unit of claim 11, wherein

the filter unit consists of a low-pass filter that attenuates a high frequency band component of the audio signal and a high-pass filter that attenuates a low frequency band component of the audio signal output from the low-pass filter.

13. (New) The sound quality compensating unit of claim 12, wherein

the low-pass filter has filter characteristics that attenuate a higher frequency band component of the audio signal with weakening the electric field intensity in a predetermined electric field intensity range of the broadcast wave signal, and wherein

the high-pass filter has filter characteristics that attenuate a lower frequency band component of the audio signal output from the low-pass filter with weakening the electric field intensity in a predetermined electric field intensity range of the broadcast wave signal.